

What is claimed is:

1. Process for the removal of polysulfanes from crude gas formed during the production of hydrogen sulfide, characterized in that the crude gas, with a content of > 80 vol.% H_2S and > 100 to 2000 vpm, especially > 400 to 1500 vpm polysulfanes (H_2S_n with $n: 2$ to 8), is passed through a washer system, brought into contact there with water and/or methanol and a pure gas is obtained.
2. Process according to claim 1, characterized in that a 0.5 to 20 wt.% aqueous and/or methanolic solutions of an alkali or alkaline earth hydroxide or oxide is used as washing fluid.
3. Process according to claim 1, characterized in that 1 to 20 wt.% aqueous and/or methanolic solutions of organic amines of the general formula $(C_nH_{2n+1})_xNH_y$ with $n=1,2,3$; $x=2,3$; $y=0,1$; amino alcohols of the general formula $(C_nH_{2n+1}O)_xNH_y$ with $n=1,2,3$; $x=2,3$; $y=0,1$ or ammonia are used as washing fluid.
4. Process according to one or more of claims 1 to 3, characterized in that a jet washer is used.
5. Process according to claims 1 to 4, characterized in that the pre-purified gas is after-treated in a counter-current washer with aqueous or methanolic solutions.
6. Process according to claims 1 to 4, characterized in that the gas depleted in polysulfanes is passed through an adsorber bed.
7. Process according to one or more of claims 1 to 6, characterized in that the polysulfanes contained in the crude gas are depleted in the pure gas at a rate of > 50 to $> 99.5\%$, based on the crude gas.

8. Process according to one or more of claims 1 to 7, characterized in that the process is carried out at a temperature of 0 to 150°C.